



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/454,941 | 12/02/1999 | DAVID B. KIRK | 1391P | 4446 |

7590

06/19/2002

SAWYER & ASSOCIATES
PO BOX 51418
PALO ALTO, CA 94303

EXAMINER

KIM, HAROLD J

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

BA

Office Action Summary

Application No.

09/454,941

Applicant(s)

KIRK, DAVID B.

Examiner

Harold Kim

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 are presented for examination.

Abstract

2. The abstract of the disclosure is objected to because it is not in proper abstract language and format. See MPEP § 608.01(b).

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to **250 words**. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. **Claims 1, 2, 9-12, 16-17, 20-21 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Dye, US Patent no. 6,173,381.**

5. In re claim 1, Dye shows a controller chip [fig 5] comprising:

an engine [210, 212, fig 5] for managing a memory [204, 206, 214, 216, 244, fig

5] and including an interface [202]; and

Art Unit: 2182

a storage element [204, 206, 214, 216, 244, 246, fig 5] coupled to the engine, the storage element being accessible by a CPU [120, fig 2], where the engine receives commands from the CPU via the interface, manages the storage element and write the commands into the memory.

6. In re claim 2, Dye shows a FIFO buffer [204, 206, 214, 216, fig 5].
7. In re claim 9, Dye shows a graphics controllers chip [212, fig 5].
8. In re claim 10, Dye shows a graphics engine [212, fig 5].
9. In re claim 17, Dye shows the effective size of the FIFO buffer as viewed by the CPU can be as large as the memory [fig 5].
10. Claims 11-12, 16, 20-21, 25-26 are rejected under the same rationale as discussed above in claims 1, 2, 9, 10, 17.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 3-8, 13-15, 18-19, 22-24, 27, and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, US Patent no. 6,173,381, as applied to claims 1, 2, 9, 10-12, 16-17, 20-21 and 25-26 above.**

13. In re claims 3-5 and 7-8, Dye does not explicitly show a circular FIFO buffer, a double buffer, a triple buffer, a checking mechanism. Official Notice is taken that both the concept and the advantages of providing for a circular FIFO buffer, a double buffer,

Art Unit: 2182

a triple buffer, a checking mechanism are old and well known in the art. Therefore, it would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the circular FIFO buffer, double buffer, triple buffer, checking mechanism in Dye for more flexible device by allowing it to operate in multiple configurations and more reliable system by controlling and predicting data flow.

14. In re claim 6, Dye shows the effective size of the FIFO buffer as viewed by the CPU can be as large as the memory [fig 5].

15. Claims 13-15, 18-19, 22-24, 27, and 28 are rejected under the same rationale as discussed above in claims 3-8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239 for regular communications (for informal or draft communications, please label "PROPOSED" or "DRAFT"), and
(703) 746-7238 for After Final communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the technology center receptionist whose telephone number is (703) 306-5631.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is (703) 305-1948.

The examiner can normally be reached on Monday-Thursday 6 AM - 4:30 PM.

Art Unit: 2182


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301.



Harold J. Kim

Patent Examiner

June 16, 2002/HK



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100